

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/780,485
Attorney Docket No. Q63128

REMARKS

In the present Amendment, Claim 1 has been amended to replace “a hardness ... of 30-100” and “170°” with --a hardness ... of 40-95-- and --170°C--, respectively. These amendments are supported by the specification, for example, at page 7, lines 20-23, and Claim 3, respectively. Claim 1 has also been amended to incorporate the subject matter of Claim 2, and Claim 2 has been canceled, accordingly.

Claim 8 has been amended to recite --which cell is formed by a blowing agent having a decomposition temperature of 170°C or above--, to incorporate the subject matter of Claim 2, and to replace “a hardness ... of 30-100” with --a hardness ... of 40-95--. These amendments are supported by the specification, for example, in Claim 1.

Claim 9 has been amended to replace “a Young's modulus (E_0) of 10^2 - 10^6 MPa” with --a Young's modulus (E_0) of 10^4 - 10^6 MPa--. This amendment is supported by the specification, for example, at page 16, lines 13-15.

No new matter has been added, and thus entry of the Amendment is respectfully submitted to be proper. Upon entry of the Amendment, Claims 1 and 3-11 will be all the claims pending in the application.

In Paragraph No. 3 of the Office Action, Claims 1 and 8 have been rejected under 35 U.S.C. § 102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over Mouri et al (U.S. 5,147,477).

Applicants respectfully submit that Claims 1 and 8 as amended are not anticipated by or rendered obvious over Mouri et al for at least the following reasons.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/780,485
Attorney Docket No. Q63128

As indicated above, Applicants have in the Amendment, amended Claims 1 and 8 to incorporate the subject matter of Claim 2, which is not included in the rejection.

Further, the foamed rubber of the present invention comprises a foamed ethylene- α -olefin-non-conjugated diene copolymer rubber. Claim 8 further recites that the foamed rubber and a rigid body are integrally bonded to each other.

Mouri et al does not disclose or suggest neither a foamed rubber comprising a foamed ethylene- α -olefin-non-conjugated diene copolymer rubber, nor a composite comprising a foamed rubber and a rigid body integrally bonded to each other. See Figure 1 of Mouri et al.

In Paragraph No. 3 of the Office Action, the Examiner asserts that “Mouri teaches a pneumatic tire comprising a [belt] 7 and a tread integrally bonded to each other (figure 1). The belt is corresponding to the claimed a rigid body.”

Applicants respectfully traverse the Examiner’s statement, because the rigid body of Mouri et al corresponds to a portion of the reference number 7 (“belts”) having a round cross-section depicted in Figure 1.

In the art of tire, one skilled in the art of tire can appreciate easily that the technical term “belt” means a rigid body (such as a steel cord) surrounded by belt rubber. For the Examiner’s consideration, Applicants herewith attach a copy of pertinent portion of a reference (“GOMU KOGYO BINRAN” (phonetic translation), the fourth edition).

In Figure 1 of Mouri et al, the portion “7” has a structure wherein a rigid body, i.e., a cord having a round cross-section, is surrounded by rubber. Thus, it is via belt rubber that the rigid body contacts with the tread of the foamed rubber. In other words, the rigid body of Mouri et al

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/780,485
Attorney Docket No. Q63128

does not contact directly with the tread of the foamed rubber, and therefore, the rigid body and the foamed rubber are not integrally bonded to each other, as presently claimed.

In view of the above, Applicants respectfully submit that present Claims 1 and 8 are not anticipated by or rendered obvious over Mouri et al. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection.

In Paragraph No. 4 of the Office Action, Claim 2 has been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Mouri et al in view of Sandstrom et al (US 5,216,006).

Applicants respectfully submit that the rejection is moot, because Claim 2 has been canceled.

In Paragraph No. 5 of the Office Action, Claims 9 and 10 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Mouri et al in view of Boustany et al (US 3,802,478). Further, in Paragraph No. 6 of the Office Action, Claim 11 has been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Mouri et al in view of Boustany et al, further in view of JP 02-206629.

Applicants respectfully submit that Claims 9-11 as amended are patentable over the cited references for the same reasons above, because Boustany et al and JP '629 do not rectify the deficiencies of Mouri et al. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejections.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/780,485
Attorney Docket No. Q63128

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Fang Liu
Registration No. 51,283

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: February 24, 2004

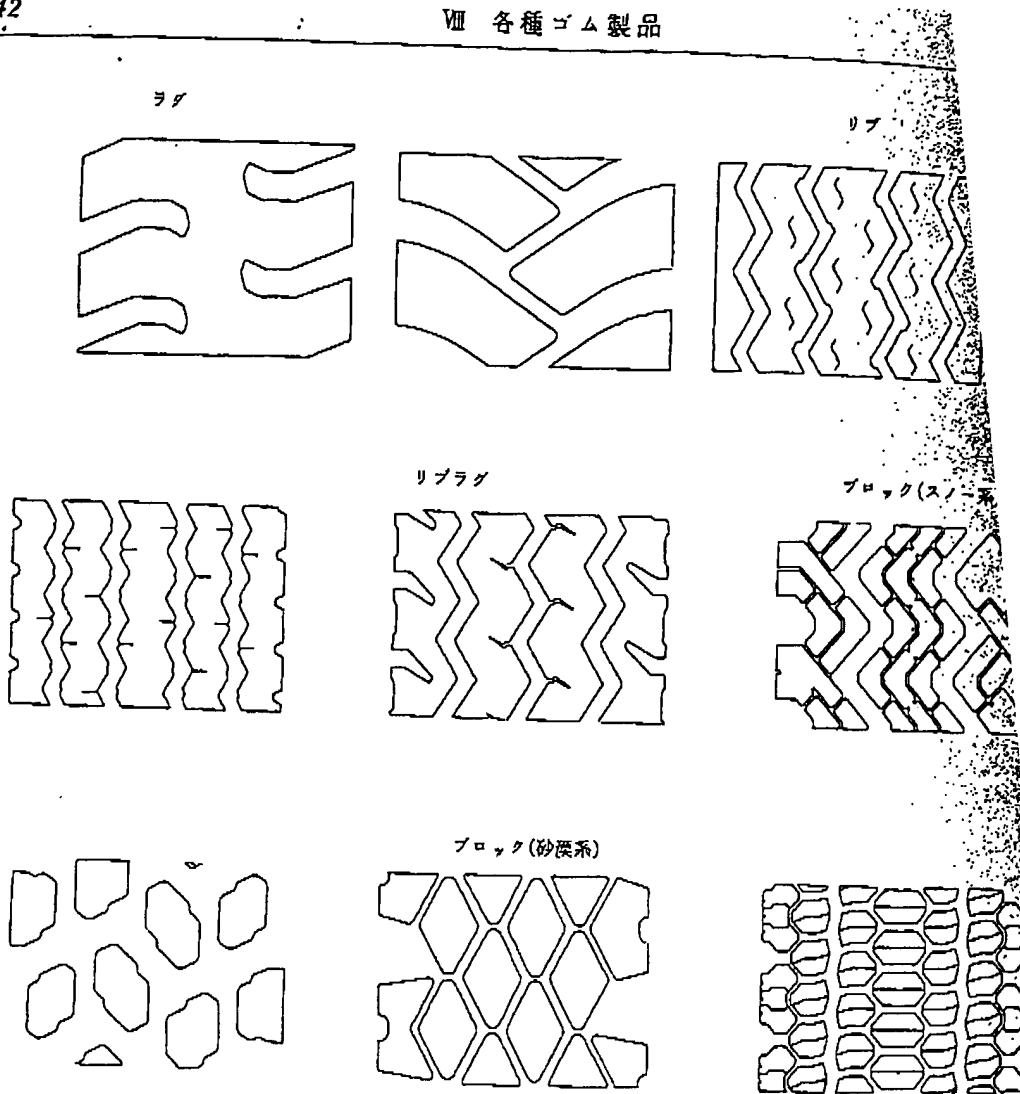


図1-6 パターンの具体例

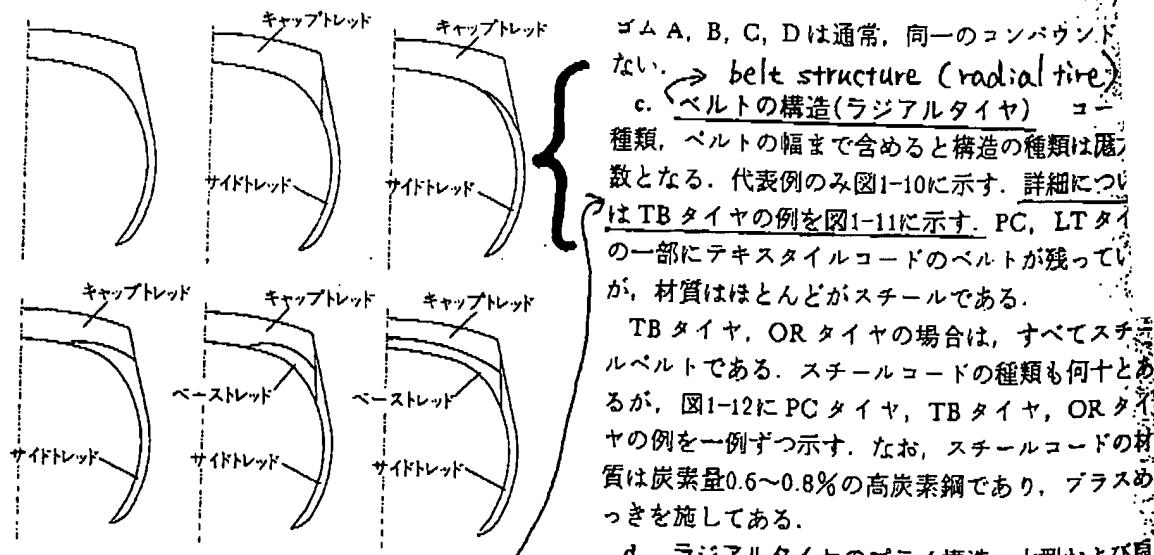


図1-7 トレッド構造の具体例

ゴム A, B, C, D は通常、同一のコンパウンドでない。
→ belt structure (radial tire)

c. ベルトの構造(ラジアルタイヤ) タイヤの種類、ベルトの幅まで含めると構造の種類は専門家による数となる。代表例のみ図1-10に示す。詳細については TB タイヤの例を図1-11に示す。PC, LT タイヤの一部にテキスタイルコードのベルトが残っているが、材質はほとんどがスチールである。

TB タイヤ、OR タイヤの場合は、すべてスチールベルトである。スチールコードの種類も何十種類あるが、図1-12に PC タイヤ、TB タイヤ、OR タイヤの例を一例ずつ示す。なお、スチールコードの材質は炭素量 0.6~0.8% の高炭素鋼であり、プラスチックを施してある。

d. ラジアルタイヤのプライ構造 大型および扁平の PC ラジアルタイヤにはプライ層 2 枚のものがある。

An example of TB tire is shown in figure 1-11 in the detail.

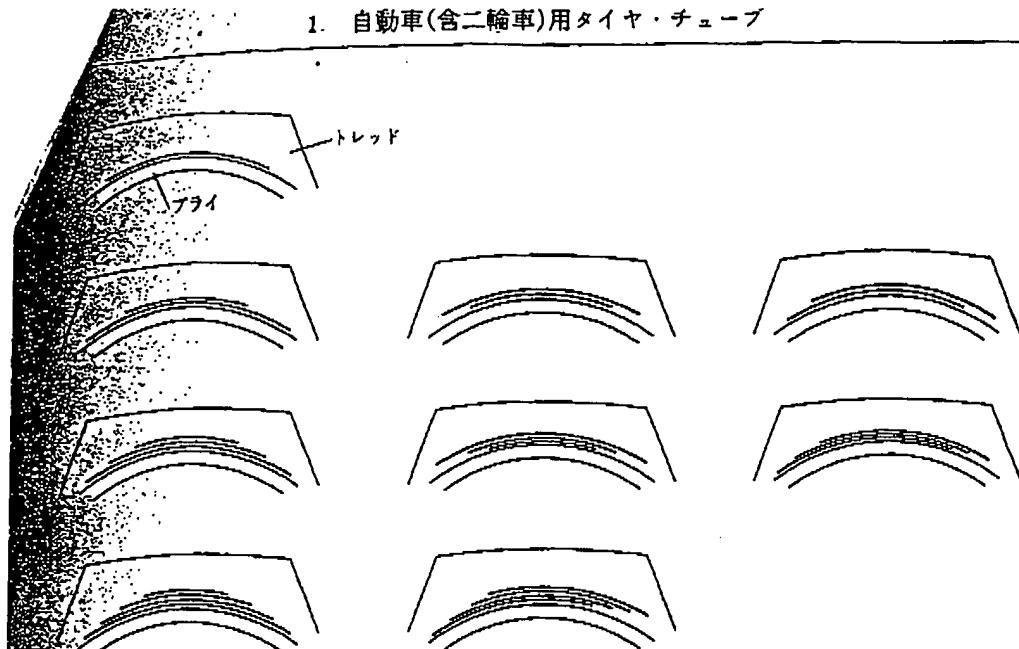


図1-8 TB, OR バイアスのブレーカー構造の具体例

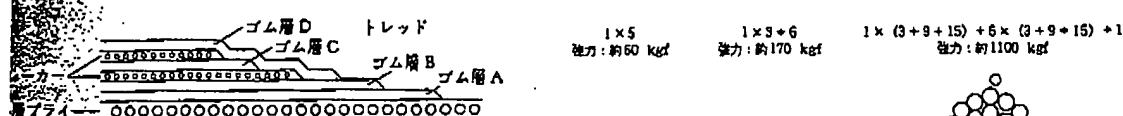


図1-9 ブレーカー端部の詳細構造の例

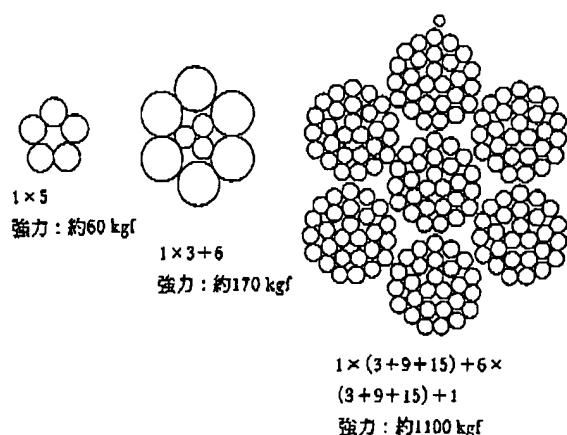
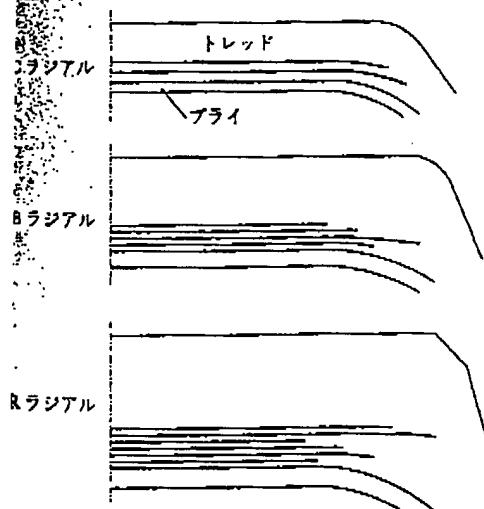


図1-12 ベルト用スチールコード例



図1-11 ベルト端部の詳細構造の例

figure 1-11 An example of the detailed structure of the end portion of belt

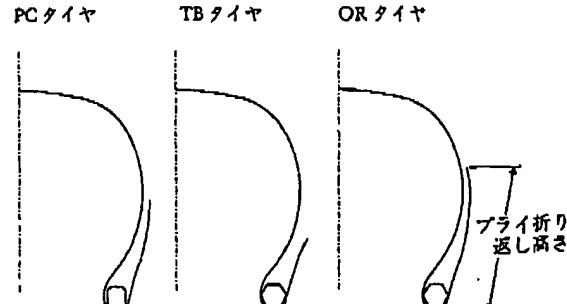


図1-13 ラジアルタイヤのブレイ構造

→ GOMU KOGYO BINRAN, the fourth edition
(phonetic translation)

ゴム工業便覧<第四版> 定価 36,050円

平成6年1月20日
→ January 20, 1994 (publishing date)

編集発行者 社団法人 日本ゴム協会

東京都港区元赤坂1丁目5番26号

印刷所 小宮山印刷工業株式会社

東京都新宿区天神町78番地

発行所 社団法人 日本ゴム協会

〒107 東京都港区元赤坂1丁目5番26号

電話 03-3401-2957 振替「東京9-48393」

ファクシミリ 03-3401-4143

著丁・及丁本はお取替えいたします。

→ Publisher: Shadanhojin Nihon Gomu Kyokai